

### Abstract

#### WAVEGUIDE GRATING-BASED WAVELENGTH SELECTIVE SWITCH ACTUATED BY THERMAL MECHANISM

5       A wavelength selective switch is disclosed. The switch comprises an input waveguide for carrying an optical signal having a wavelength  $\lambda_i$ . Also included is an output waveguide having a Bragg grating adapted for coupling the wavelength  $\lambda_i$  into the output waveguide in a coupling zone. Finally, provided is a heater element that can selectively provide thermal energy to the coupling zone such that the Bragg grating does not couple the wavelength  $\lambda_i$ .